

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A non-pneumatic tire comprising:

a toroidal-shaped tube having inner and outer circumferential surfaces interconnected by opposite side surfaces to collectively form a hollow chamber therebetween, said tube comprising at least two openings independently located proximate the inner circumferential surface; and

a solid fill composition disposed in the hollow chamber of the tube;

wherein each of the openings is adapted to receive the solid fill composition so as to fill the hollow chamber of the tube.

2. (Original) The tire of claim 1 wherein the fill composition comprises a foam material.
3. (Original) The tire of claim 1 wherein the fill composition comprises a polyurethane.
4. (Original) The tire of claim 1 wherein the fill composition has a surface Durometer hardness of greater than about 60 as measured by Shore A.
5. (Original) The tire of claim 1 wherein the fill composition has a surface Durometer hardness in the range from about 68 to about 75 as measured by Shore A.

6. (Original) The tire of claim 1 wherein the tube is formed of an elastomeric material.
7. (Original) The tire of claim 6 wherein the tube is formed of rubber.
8. (Original) The tire of claim 7 wherein the rubber is free of reinforcing agents.
9. (Original) The tire of claim 1 wherein the tube has a number of openings ranging from 4 to 12 at spaced locations along the inner circumferential surface.
10. (Original) The tire of claim 1 wherein the tube has 8 openings spaced along the inner circumferential surface.
11. (Original) The tire of claim 1 wherein the tube comprises a plurality of layers with the outermost layer defining the inner and outer circumferential surfaces and opposite side surfaces of the tube and the innermost layer defining the hollow chamber.
12. (Original) The tire of claim 1 wherein the tube further comprises a raised area on the outer circumferential surface of the tube forming a tread pattern along the outer circumferential surface.
13. (Original) A wheel comprising a rim and the tire of claim 1 mounted on the rim.

14. (Original) A low speed vehicle comprising the wheel of claim 13.

15. (Currently Amended) A non-pneumatic tire comprising:

a toroidal-shaped tube having inner and outer circumferential surfaces interconnected by opposite side surfaces to collectively form a hollow chamber therebetween, said tube comprising a number of independent openings ranging from 4 to 12 with each opening spaced at locations proximate the inner circumferential surface; and

a solid fill composition disposed in the hollow chamber of the tube, the composition having a surface Durometer hardness of greater than about 60, as measured by Shore A;

wherein each of the openings is adapted to receive the solid fill composition so as to fill the hollow chamber of the tube.

16. (Original) The tire of claim 15 wherein the fill composition has a surface Durometer hardness in the range from about 68 to about 75, as measured by Shore A.

17. (Original) The tire of claim 15 wherein the fill composition comprises a polyurethane-based foam.

18. (Currently Amended) The tire of claim 15 wherein the tube has ~~[[approximately]]~~ 8 rectangular openings, each opening having a width ranging from about 0.2 inches to about 0.8 inches and a length ranging from about 0.5 inches to about 1 inch, the ~~[[approximately 8]]~~ openings being substantially equidistantly spaced along the interior circumferential surface.

19. (Original) The tire of claim 15 wherein the tube further comprises a raised area on the outer circumferential surface of the tube forming a tread pattern along said outer circumferential surface.

20. (Original) The tire of claim 15 wherein the tube has an outer diameter ranging from about 8 inches to about 20 inches, an inner diameter ranging from about 2 inches to about 16 inches, an outer circumferential surface having a width ranging from about 2 inches to about 6 inches, and a tire height measured radially between the outer and inner circumferential surfaces ranging from about 2 inches to about 6 inches.

21. (Original) The tire of claim 15 wherein the tube has a Durometer hardness of greater than about 50, as measured by Shore A.

22. (Original) A wheel comprising a rim and the tire of claim 15 mounted on said rim.

23. (Original) A low speed vehicle comprising the wheel of claim 22.

24. (Original) The vehicle of claim 23 selected from the group consisting of a golf cart, a wheel barrow, a hand cart, a construction cart, a lawnmower, a wheel chair, a material cart, and a farm machine.

25. (Currently Amended) A non-pneumatic tire comprising:

a toroidal-shaped rubber tube having inner and outer circumferential surfaces interconnected by opposite side surfaces to collectively form a hollow chamber therebetween, said tube comprising ~~[[approximately 8]]~~ a number of independent rectangular openings ranging from 4 to 12, each opening having a width ranging from about 0.3 inches to about 0.5 inches and a length ranging from about 0.6 inches to about 0.8 inches, the ~~[[approximately 8]]~~ openings being substantially equidistantly spaced along the interior circumferential surface; an outer diameter ranging from about 8 inches to about 20 inches, an inner diameter ranging from about 2 inches to about 16 inches; an outer circumferential surface having a width ranging from about 2 inches to about 6 inches; and a height measured radially between the outer and inner circumferential surfaces ranging from about 2 inches to about 6 inches; and

a solid polyurethane foam fill composition disposed in the hollow chamber of the tube, said composition having a surface Durometer hardness in the range from about 68 to about 75, as measured by Shore A.

26. (Original) The tire of claim 25 wherein the tube has a Durometer hardness of greater than about 50, as measured by Shore A.

27. (Original) A wheel comprising a rim and the tire of claim 25 mounted on said rim.

28. (Original) A low speed vehicle selected from the group consisting of a golf cart, a wheel barrow, a hand cart, a construction cart, a lawnmower, a wheel chair, a material cart, and a farm machine, the vehicle comprising the wheel of claim 27.

29-39. (Canceled)